

DEFENDING AMERICA AT THE SPEED OF INNOVATION

🕒 The Situation

Every second matters when defending the American homeland. Across the U.S. Air Force's homeland air-defense mission, operators at Air Defense Sectors stood watch, but the tools working against them were their own. Decades of fragmented, post-9/11 command-and-control systems forced warfighters to manually piece together critical data in real time, essentially serving as human computers in the moments that mattered most. With over 800 U.S. and Canadian radar feeds flowing through incompatible, stovepiped systems, the result was a 6.5-minute timeline to close the kill chain. In modern defense, that is not a delay. It is a vulnerability.

💡 The Solution

In partnership with AWS, SAIC reimagined the entire operational model from the ground up. Through the Advanced Battle Management System's Cloud-Based Command and Control (CBC2) program, delivered to NORAD, USNORTHCOM, and PACAF, SAIC dismantled those legacy barriers and replaced them with a unified, intelligent data layer where automated fusion technologies handle the heavy cognitive lifting, so warfighters can focus on decisions, not data.

In just one year, we engineered and deployed 16 hybrid cloud environments integrating AWS Snowball Edge devices, Dell infrastructure, Amazon EKS Anywhere, and the Air Force Big Bang stack. SAIC deployed Amazon WorkSpaces into Cloud One, eliminating operator onboarding friction, erasing geolocation and time zone barriers, and delivering seamless Common Access Card authentication. Critically, SAIC also eliminated desktop fatigue by consolidating 4 to 6 separated compute systems and displays into a single, remotely sourced unified desktop. Operators can now dynamically assign desktops through the remote system, with CBC2 condensing full system functionality into a single desktop with dual monitor scope. We built secure data transfer pipelines operating at 25MB/s with sub-2 millisecond latency, enabling low-to-high traffic flow while staging high-to-low system observation and notification traffic for future expansion. SAIC integrated next-generation firewall technologies into the JWCC Marketplace and pioneered secure IP Multi-Network Tunnel solutions to keep mission-critical connections alive under any condition.



16 hybrid cloud environments deployed
(in 1 year)



4–6 systems consolidated into 1 unified desktop



25 MB/s secure data transfer at sub-2 ms latency



Real-time low-to-high flow; high-to-low staged for expansion



Amazon WorkSpaces in Cloud One with seamless CAC authentication

🔊 The Impact

6X
faster kill chain closure



The numbers speak for themselves. Kill-chain closure time dropped from 6.5 minutes to under one minute, a 6x improvement. Over 800 active data feeds spanning two nations' classified architectures are now fused into a single operating picture, enabling seamless U.S. and Canada collaboration. Warfighters are no longer burdened by data overload or physical workspace clutter. They are empowered by clarity.

None of this was possible alone. Together, SAIC and AWS redefined the operational model, dismantling stovepiped systems and replacing them with a coherent, unified data layer and automated decision-making that shifts central cognition away from the warfighter. That is the power of a true AWS partnership.

Warfighters went from **data overload** to **clarity** —
automated decision-making shifts central cognition
away from the warfighter.

“The capabilities that the CBC2 platform could bring to our operators ensures they will have the most advanced and effective technologies to find, fix, track, and target airborne threats”



*EADS Commander Col. Joseph Roos
(Ret May 2026)*

FOR MORE INFORMATION

Timothy Wilhelm
timothy.a.wilhelm@saic.com